

(Ramlit Associates, 1984). The remedies include reducing application rates, selecting less persistent and less mobile pesticides, taking care in container disposal and other "housekeeping" activities, placing grout seals on agricultural wells to prevent short-circuiting of chemicals down well casings, and preventing backsiphonage through combined irrigation/chemical injection rigs. All these practices presume the continuing use of pesticides. The key problems faced by agencies regulating pesticide use are lack of monitoring data for pesticides in ground water, lack of knowledge of pesticide mobility and fate in the ground, and lack of knowledge of short- and long-term effects of particular pesticides sufficient to determine action levels (Ramlit Associates, 1984).

In 1983, about 3.5 million tons of urban hazardous wastes (wet weight) were hauled from generator sites off-site to treatment, storage, or disposal sites. Since most of the total tonnage is treated and disposed on-site at industrial locations rather than hauled off-site, the total wet weight of hazardous wastes generated in California apparently exceeded 7 million tons in 1983 (State of California, Toxic Substances Control Division).

The eventual goal of urban hazardous waste management is to treat and neutralize the waste stream before it is placed on land. At present, however, the state is primarily engaged in enforcing RCRA, through a system of prohibitions and storage and disposal regulations, backed by enforcement. The size and scope of the enforcement program is discussed further in Chapter 4. The overriding management problem with respect to urban hazardous wastes in California is the lack of treatment-based neutralization and disposal facilities. The ultimate off-site disposal points for hazardous wastes at present are seven landfills: four "Class I sites" and three "Class II-I sites." Under the state's landfill classification scheme, Class I sites are the most secure and are supposed to provide geologic containment by means of an impermeable barrier to prevent leachate from reaching underground waters. Class II-I sites are currently allowed to receive hazardous wastes but are being phased out as they do not provide for geologic containment. A recent report on the subject (Environmental Defense Fund, 1985b) concludes that none of the disposal sites is meeting the established criteria for containment of wastes. The State Water Resources Control Board has recently revised its land disposal regulations. The classification systems for both sites and wastes have been reviewed and made more stringent.

The underground storage tank problem became prominent in the San Francisco Bay area (Silicon Valley) with a significant leak of solvent reported by the facility owner. This experience triggered two pieces of legislation to register and regulate both existing and new underground containers. As a result of the legislation, more than 165,000 underground storage containers have been registered in California: 81 percent are for motor vehicle